

Verify/Correct Broadcast & Netmask Addresses

Revised: 5 May 2000...awj

Two sites have reported problems with voice recorded weather messages being displayed in the Broadcast Cycle, but not being broadcast on the transmitters. This may be caused by an incorrect system netmask and/or broadcast addresses. The netmask and broadcast address can be verified and corrected by using the following procedure:

1. Open a "Unix Shell" window from the "Maintenance" pull-down menu.
2. At the command prompt type the following command string:

```
/usr/sbin/ifconfig -a
```

See the following example from a NWSHQ session:

```
OMP{admin} /usr/sbin/ifconfig -a <----- User types this
NE20000: flags=23<UP,BROADCAST,NOTRAILERS>
        inet 165.92.20.111 netmask ffff0000 broadcast 165.92.255.255
lo0: flags=49<UP,LOOPBACK,RUNNING>
        inet 127.0.0.1 netmask ff000000
OMP{admin}
```

3. Note the NE20000 '**netmask**' and '**broadcast**' addresses marked in **bold** in the above example. The '**netmask**' should be **ffff0000** and the '**broadcast**' address should be **165.92.255.255** These values are true for **ALL** sites.
4. If they are both correct, proceed to Step 7. If either one or the other is not correct, then proceed to Step 5:
5. At the command prompt login as 'root' user, change the 'netmask', then verify the correction has been made. See the following example from a NWSHQ session:

```
OMP{admin} su - root <----- User types this
Password:
Display Desktop (y/n)? n <----- User types this
OMP{root} sh /etc/confnet.d/configure -i <----- User types this
These are the device(s) available on your system:
1 NE20000_0
```

Type the number of device(s) to be configured with
inet [?,??,q]: **1** <----- User types this

Please enter the IP host name for device NE20000_0
(default: OMP2): **OMP** <----- User types this

Please initialize the IP address for host 0MP
(default: 165.92.20.111): hit the <Enter> key to take default <----- **User types this**

Configure host 0MP with default Ethernet (TM)
ifconfig option?

Info message is long. (yes no ClassC BerkeleyC info;
(default: info): **yes** <----- **User types this, DO NOT USE no, ClassC or BerkeleyC**

NOTE: Once you exit the “configure” script and if you immediately rerun the “ifconfig -a” command, the resulting output may not indicate a change in the system “netmask” and “broadcast” address. You must reboot the processor for the changes to take effect.

6. Type ‘exit’ once to exit the “root” session.
7. As user ‘admin’, remote shell to 5MP.

0MP{admin} **rsh 5MP** <----- **User types this**

8. At the command prompt type the following command string:

```
/usr/sbin/ifconfig -a
```

See the following example from a NWSHQ session:

```
5MP{admin} /usr/sbin/ifconfig -a <----- User types this  
NE20000: flags=23<UP,BROADCAST,NOTRAILERS>  
        inet 165.92.20.112 netmask ffff0000 broadcast 165.92.255.255  
lo0: flags=49<UP,LOOPBACK,RUNNING>  
        inet 127.0.0.1 netmask ff000000  
5MP{admin}
```

9. Note the NE20000 ‘**netmask**’ and ‘**broadcast**’ addresses marked in **bold** in the above example. The ‘**netmask**’ should be **ffff0000** and the ‘**broadcast**’ address should be **165.92.255.255** These values are true for **ALL** sites.
10. If they are both correct, type ‘exit’ once to exit the “rsh” session and proceed to Step 13. If either one or the other is not correct, then proceed to Step 11.
11. At the command prompt login as ‘root’ user, change the ‘netmask’, then verify the correction has been made. See the following example from a NWSHQ session:

```
5MP{admin} su - root <----- User types this  
Password:  
Display Desktop (y/n)? n <----- User types this  
5MP{root} sh /etc/confnet.d/configure -i <----- User types this
```

These are the device(s) available on your system:

1 NE20000

Type the number of device(s) to be configured with

inet [?,?,q]: **1** <----- **User types this**

Please enter the IP host name for device NE20000

(default: 5MP2): **0MP** <----- **User types this**

Please initialize the IP address for host 0MP

(default: 165.92.20.112): hit the <Enter> key to take default <----- **User types this**

Configure host 5MP with default Ethernet (TM)

ifconfig option?

Info message is long. (yes no ClassC BerkeleyC info;

(default: info): **yes** <----- **User types this, DO NOT USE no, ClassC or BerkeleyC**

NOTE: Once you exit the “configure” script and if you immediately rerun the “ifconfig -a” command, the resulting output may not indicate a change in the system “netmask” and “broadcast” address. You must reboot the processor for the changes to take effect.

12. Type ‘exit’ once to exit the “root” session.
Type ‘exit’ once to exit the “rsh” session.
13. **If the netmask and/or broadcast address was NOT changed on 0MP and 5MP**, type 'exit' until you exit the “Unix shell” session. Continue normal CRS operations.
If the netmask and/or broadcast address was changed on either 0MP or 5MP, the CRS application must be halted and both MP’s (ie. 0MP and 5MP) must be rebooted for the changes to be made permanent.